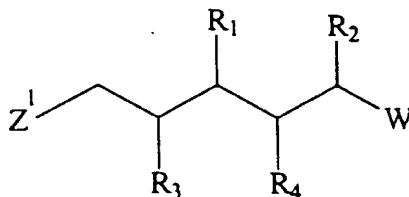


Antibiotic polyketide compounds are provided having the formula

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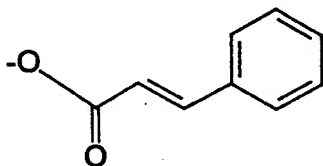
wherein:

R<sub>1</sub> and R<sub>2</sub> are the same or different and are independently H or R;

- TOO11
- 20 R is a structural fragment having a saturated or unsaturated linear, branched, or cyclic, skeleton containing one to ten carbon atoms in which the carbon atoms may be optionally substituted with a substituent selected from the group consisting of: -OH; =O; -OR<sub>5</sub>; -O<sub>2</sub>CR<sub>5</sub>; -SH; -SR<sub>5</sub>; -SOCR<sub>5</sub>; -NH<sub>2</sub>; -NHR<sub>5</sub>; -NH(R<sub>5</sub>)<sub>2</sub>; -NHCOR<sub>5</sub>; NRCOR<sub>5</sub>; -I; -Br; -Cl; -F; -CN; -CO<sub>2</sub>H; -CO<sub>2</sub>R<sub>5</sub>; -CHO; -COR<sub>5</sub>; -CONH<sub>2</sub>; -CONHR<sub>5</sub>; 25 -CON(R<sub>5</sub>)<sub>2</sub>; -COSH; -COSR<sub>5</sub>; -NO<sub>2</sub>; -SO<sub>3</sub>H; -SOR<sub>5</sub>; and -SO<sub>2</sub>R<sub>5</sub>, wherein R<sub>5</sub> is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group;

R<sub>3</sub> and R<sub>4</sub> are different and are independently selected from the groups consisting of OH,

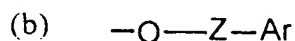
(a)



30

5

and



wherein,

10  $Z^1$  and Z are linear or branched, saturated or unsaturated, one to ten carbon fragments optionally substituted with Y;

Ar is a monocyclic, bicyclic or tricyclic, fully or partially aromatic system containing five or six membered carbocyclic or, oxygen, nitrogen or sulphur containing heterocyclic rings, optionally substituted with R or Y;

15

Y is selected from the group consisting of: H; =O, -OH; -OR; -O<sub>2</sub>CR; -SH; -SR; -SO<sub>2</sub>CR; -NH<sub>2</sub>; -NHR; -NH(R)<sub>2</sub>; -NHCOR; NRCOR; -I; -Br; -Cl; -F; -CN; -CO<sub>2</sub>H; -CO<sub>2</sub>R; -CHO; -COR; -CONH<sub>2</sub>; -CONHR; -CON(R)<sub>2</sub>; -COSH; -COSR; -NO<sub>2</sub>; -SO<sub>3</sub>H; -SOR; -SO<sub>2</sub>R; and, -O- (epoxide);

20

W is H or R;

with the provisos that when W is H, R<sub>2</sub> is not H; when R<sub>2</sub> is CH<sub>3</sub>, W is not n-propyl; and, one of R<sub>3</sub> and R<sub>4</sub> is (a) or (b) and another of R<sub>3</sub> and R<sub>4</sub> is OH.

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